

ADJUSTABLE SUSPENSION ASSEMBLY CONTROL ARMS

ABSTRACT OF THE DISCLOSURE

A suspension assembly for a vehicle is provided that includes a frame supporting upper and lower control arms in spaced relation to one another that are pivotally connected to the frame. A steering knuckle is supported between the control arms and supports a wheel. The orientation of the knuckle defines the wheel attitude, which includes caster, camber, toe, and track. The knuckle is rotated about its axis in response to mechanical inputs from a steering wheel. First and second actuators may be supported on one of the control arms and connected to a portion of the knuckle. A third actuator may be supported on the other control arm and connected to another portion of the knuckle. At least one sensor detects vehicle ride conditions such as braking, vehicle yaw, and steering position. A controller is connected to the sensors and the actuators to command the actuators to adjust at least one of the caster, camber, toe, and track in response to the vehicle ride conditions.